



SERVICE MANUAL



MODEL SM-4000H

"In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used."

SPECIFICATIONS

GENERAL

Power source.....AC 110/220/240V, 50/60Hz
Semiconductors.....1-IC (Integrated circuit), 53-Transistors, 27-Diodes, 1-LED
Dimensions.....442(W) x 144(H) x 380(D) mm
Weight.....16 kg

MAIN AMPLIFIER

Circuit.....Two-stage differential amplifier, pure complimentary system, OCL (Output Condenser-Less)
Continuous power output
2 x 70W/4-ohms....Both channels drive, at 1kHz
0.05% distortion
2 x 58W/8-ohms....Both channels drive, at 1kHz
0.05% distortion
Total harmonic distortion.....0.02% at 25W
Intermodulation distortion.....0.05% at 25W
Damping factor.....More than 60 (at 1kHz, 8-ohms)
Power bandwidth.....7Hz ~ 70kHz at 0.3% distortion, 25W
Frequency response.....15Hz ~ 90kHz (± 1.5 dB)
Input sensitivity and input impedance.....800mV/50K ohms

PRE AMPLIFIER

Circuit.....Three-stage direct coupled equalizer circuit whose first stage serves as differential amplifier.
Type "NF" tone control circuit.

Input sensitivity and input impedance

PHONO 1.....2.5mV/47K ohms
PHONO 2.....2.5mV/47K ohms, 100K ohms
MC.....0.25mV/100 ohms
AUX 1 and 2 150mV/47K ohms
TUNER.....150mV/47K ohms
TAPE PLAYBACK

1 and 2.....150mV/47K ohms
TAPE PLAYBACK 1 and 2 (DIN socket) 1 and 2 150mV/47K ohms

Output level and load impedance

REC 1 and 2 150mV/47K ohms
REC 1 and 2 } 30mV/82K ohms
(DIN socket)

Max. allowable input

for PHONO { 400mV(RMS, 1kHz)
.....1130mV(P-P, 1kHz)

Deflection of "RIAA" curve for equalizer circuit from standard

"RIAA" curve ± 0.3 dB

Frequency response.....15Hz ~ 70kHz ± 1.5 dB (TUNER, AUX, TAPE PLAYBACK)

Tone control

Bass..... ± 10 dB at 100Hz, turnover 600Hz
..... ± 10 dB at 50Hz, turnover 300Hz
..... ± 10 dB at 25Hz, turnover 150Hz
Treble..... ± 10 dB at 10kHz, turnover 1.5kHz
..... ± 10 dB at 20kHz, turnover 3kHz
..... ± 10 dB at 40kHz, turnover 6kHz

Filter

Low cut.....30Hz, 12dB/oct
High cut 7kHz, 12dB/oct

SHARP CORPORATION / OSAKA, JAPAN

CABINET TOP REMOVAL (Refer to Figure 1)

- ① Remove 8 screws attached to washer located at side decoration panel of cabinet.
- ② Remove 2 screws attached to washer of CABINET TOP.
- ③ Gently lift up the CABINET TOP.

OPERATION PLATE REMOVAL (Refer to Figure 1)

- ④ Remove all knobs provided at the OPERATION PLATE.
- ⑤ Remove 6 screws located at OPERATION PLATE.

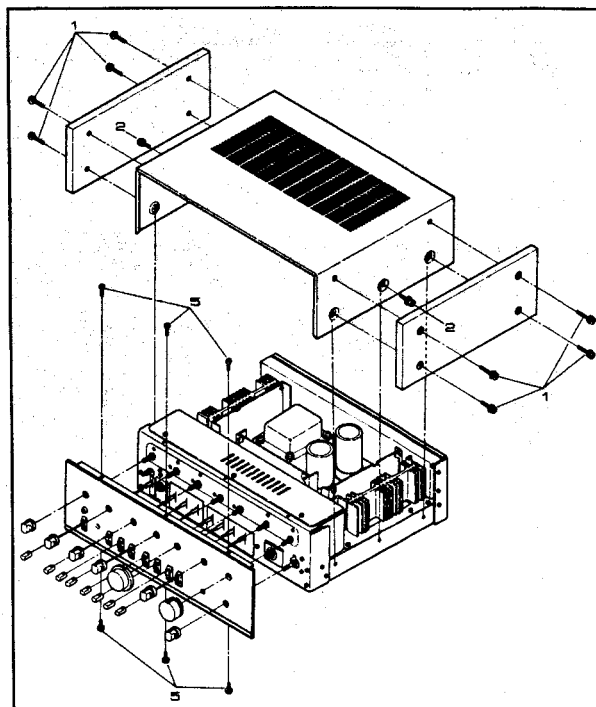


Figure 1

BOTTOM PLATE REMOVAL (Refer to Figure 2)

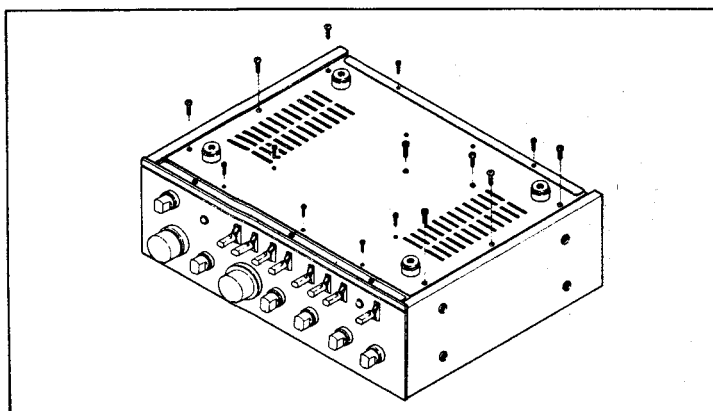


Figure 2

Remove 15 screw of CABINET BOTTOM

Caution: These (•) mark of two screws are 4φ x 8 mm.

Another ten screws are 3φ x 6 mm.

PREPARATION FOR USE

MAIN VOLTAGE SELECTION (Refer to Figure 3)

Be sure to check the pre-set voltage selector before operating the set. If the voltage is different from your local voltage, change it in the following manner:

1. Disconnect the AC cord plug from the wall outlet in order to prevent an electric shock.
2. Loosen a screw and slide the cover as illustrated in Figure 3.
3. Put a fuse in the fuse holder which has an indication of your local voltage.

Note:

In case the local voltage is 110V, two pieces of fuses should be used.

4. Replace the cover in its original position.

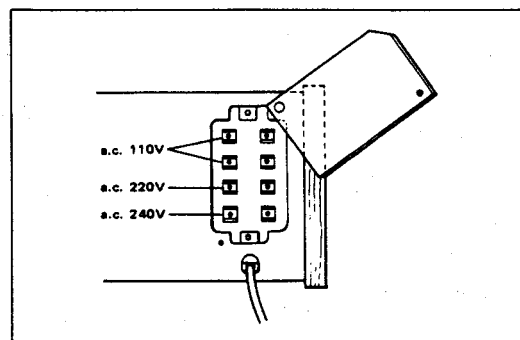


Figure 3

CIRCUIT DESCRIPTION

EQUALIZER AMPLIFIER

The equalizer circuit is driven by three kinds of power sources. The transistor at the final stage is given a high voltage of 120V to assure the amplifier of satisfactory dynamic range.

The equalizer circuit consists of high-precision parts (resistor, capacitor etc.) so that RIAA deviation is limited to the maximum (within ±0.3dB) and the impedance of RIAA elements is kept high to suppress possible distortion at the high frequency band.

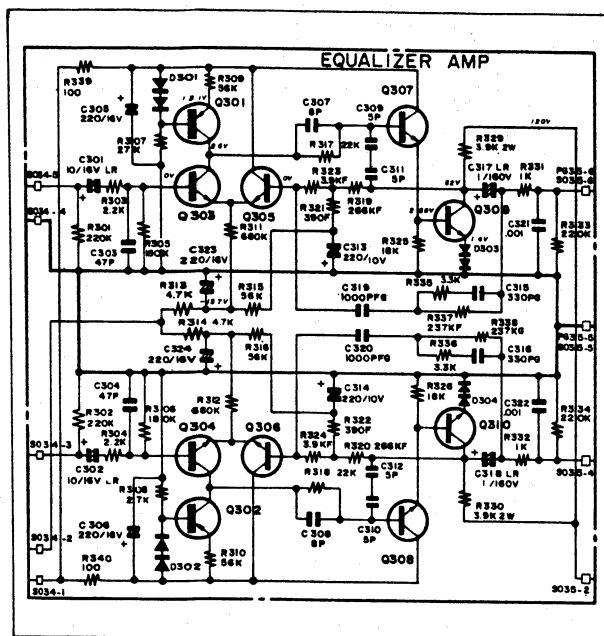


Figure 4

CIRCUIT DESCRIPTION

Passing through C301 and R303, the output of cartridge enter the differential amplifier consisting of Q303 and Q305 (Low Noise Transistor). Q301 and D301 is constant-current circuit and serve as load for Q303.

The output of Q303 enters Q307 (Emitter Follower Circuit) via R317. (C309 and C311 located at the base circuit of Q307 is high frequency oscillation preventive circuit). The output of Q307 is amplified by Q309 (Class "A" Amplifier). The gain of equalizer circuit mostly depends upon Q309.

Since RIAA characteristic is determined by C315, R335, R337 and C319 (Negative Feedback Circuit), these parts should be qualified ones.

Notes: R333.... It serves to make easier the discharge of C319 and also to restrict shock noise caused when the function switch is operated.

C303.... It serves to prevent SW broadcasts etc. from mixing in the unit (this is caused due to high gain of equalizer circuit).

TONE AMPLIFIER

The tone circuit makes use of the high gain of IC (Integrated Circuit) which incorporates differential one-stage directcoupled three-stage circuit, in order to lower the distortion factor.

There are two kinds of power source to drive the tone circuit and the potential of input/output part is kept zero. The capacitor used for the input/output part is low leak type to reduce residual noise.

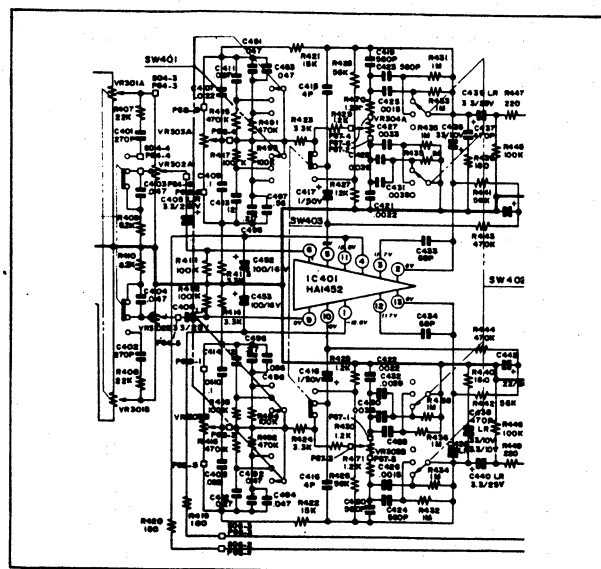


Figure 5

CIRCUIT DESCRIPTION

After being controlled by the volume control (VR302), the signal enters the terminal 6 of IC401 via C405. The signal amplified by IC401 comes out of the terminal 2 and enters the filter circuit via C439.

The negative feedback circuit consists of the parts of tone circuit. Tone control of low or high frequency band is made by varying the NF amount by the variable resistor (VR303, VR304).

Frequency turnover is made by the switches (SW401; low frequency band, SW402; high frequency band) to vary the capacitance of capacitor. The variable/defeat circuit consists of the switch (SW403) that switches over the tone control NF circuit and NF circuit having a flat frequency characteristic.

FILTER CIRCUIT

There are two types of filter circuit, one; 7kHz, -6dB/oct. and another; 30 Hz, -12 dB/oct.

CIRCUIT DESCRIPTION

The high cut filter consists of R476 and C473, and the cutoff frequency is 7 kHz and the attenuation, 6 dB/oct. The low cut filter is a filter of NF (including C443 and R449) type making use of the emitter follower, and the cutoff frequency is 30 Hz and the attenuation 12 dB/oct.

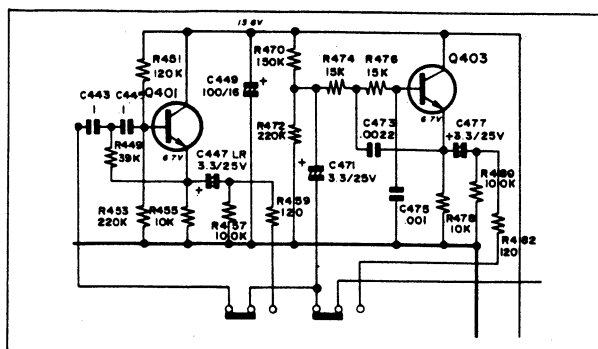


Figure 6

MAIN AMPLIFIER

The main amplifier consists of all-stage direct-coupled pure complementary output condenserless circuit.

FEAUTURE OF PURE COMPLEMENTARY OCL CIRCUIT

Since this circuit is not using output capacitor, the frequency characteristic is kept uniform even at very low frequency band and the output impedance is low in any of frequency bands resulting in that the value of damping factor is made larger so that the braking efficiency of speaker is increased. With this circuit, since a 100 percent NF is assured when the frequency of signal is zero and the value of NF is determined at only one place when the frequency of signal is at low band, the function of circuit is stabilized.

CIRCUIT DESCRIPTION

The main amplifier is OCL circuit in which the class "A" drive circuit consists of 2 stage differential amplifier circuit.

The signal coming from the filter circuit is amplified by differential amplifier (Q502, Q503) via R502 and C504.

Since this differential amplifier consists of PNP type low noise transistor (2SA836D), a high value of S/N ratio is assured. And this amplifier functions to keep zero the center voltage (speaker terminal voltage) as well as to amplify signals. The zero adjustment of potential is to be made by using semi-variable resistor (VR501). Signal thus amplified by the differential amplifier is further amplified by differential amplifier (Q504 and Q505). Moreover, the signal is amplified for the half cycle at the driver amplifier stage consisting of Q510 (NPN type transistor) and Q511 (PNP type transistor). Then, the signal is further amplified for the half cycle at Q901 (NPN type transistor) and Q902 (PNP type transistor) to be supplied to the speaker. Q501 and Q506 is constant-current circuit and its amperage is determined by D501. Q501 functions to protect the differential amplifier (Q502 and Q503) against fluctuations of temperature and voltage resulting in that the center voltage (speaker terminal voltage) is kept constant. Q506 is constant-current circuit to supply constant current so that the load applied to the class "A" driver Q505 will be reduced thus the gain being increased. As a result of the gain of Q505 being increased by Q506, plenty of NF is produced and so the distortion is lessened. NF factor of NF circuit is determined by R520 and R517, and the higher NF factor, the higher is the gain. NF factor at the low frequency band is determined by C511 and R517. Q507 and D506 are to cause the bias of class "B" drive stage and to produce idling current of 33 ~ 100 mA so that cross-over distortion due to class "B" operation is eliminated. The idling current is to be adjusted by semi-variable resistor (VR502). Q508, Q509, D502 and D503 are short circuit, etc. at the output section and they detect voltage which will be caused at R528 and R531 (emitter resistor) if current runs excessively – if the detected voltage is higher than as rated, the collector-emitter of Q508(Q509) becomes conductive. D502(D503) and Q508(Q509) are being located between the base of Q510(Q511) and the center (speaker output) and serve as constant-current circuit, and this results in that the power transistor (Q901, Q902) is assured of a rating current.

SLAD (Spike-less Amplifier Design) CIRCUIT

This circuit is a unique circuit out of those in this unit and it actually consists of D504, D505, R527 and R529.

In the case of power transistor of class "B" amplifier operation, the most part of input signal is cut off for the half cycle and there arises charge or discharge at the junction according to its capacitance. Therefore, spike-like voltage is generated or the switching time is disordered against the high frequency signal resulting in that cross-distortion of high frequency band is enlarged.

SLAD circuit is for the purpose to prevent such phenomenon as above.

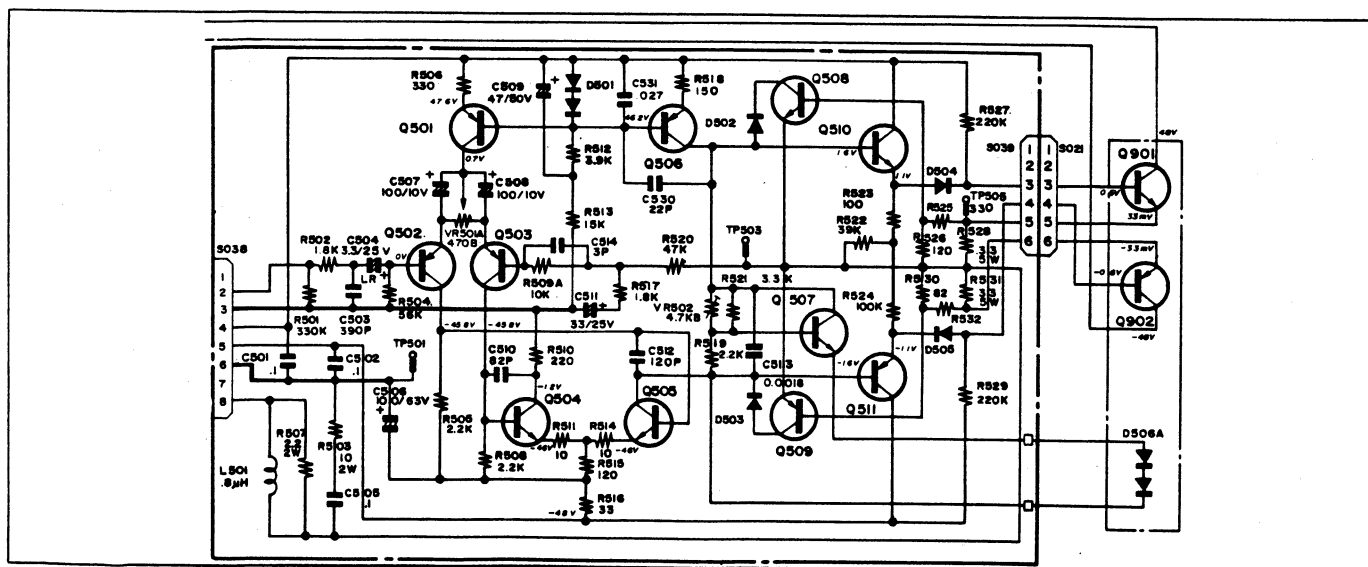


Figure 7

PROTECTIVE CIRCUIT (Relay Circuit)

This circuit is a speaker protection circuit displaying three functions as follows.

CIRCUIT DESCRIPTION

1. If DC voltage is produced at the speaker terminal, it enters to the base of Q801 via R813 and R814. When DC voltage is positive, Q801 becomes conductive and when it is negative, Q802 becomes conductive. As a result, a current runs in R807 and the base voltage of Q804 is decreased so that Q804 becomes conductive. Then the base voltage of Q805 is increased and Q805 loses its conductivity, resulting in that no current runs in the relay. With no current running in the relay, the relay switch is put in "OFF" mode, thus no current running in the speaker.
2. When the power switch is set to "ON", voltage is applied to the base of Q804. Since this base voltage is made lower when C805 is being charged, no current runs in the relay and the relay switch is put in "OFF" mode (no current runs in the speaker). The duration of charging is determined by the values of C805, R807, R808 and R809.
3. The base of Q803 is given positive voltage by R802 and negative voltage by D801 and R801 as a result of which the base voltage is made to be $-3.5V$. When the power switch is set to "OFF", since positive capacitance is larger than negative capacitance, the positive voltage is maintained for a while. Thus, the base voltage of Q803 is gradually increased from negative ($-3.5V$) to positive, Q803 is made conductive, the base voltage of Q804 is decreased, no current runs in the relay to put the relay switch in "OFF" mode and thus the speaker is cut off. It takes about one second for the speaker to be cut off after the power switch is turned off.

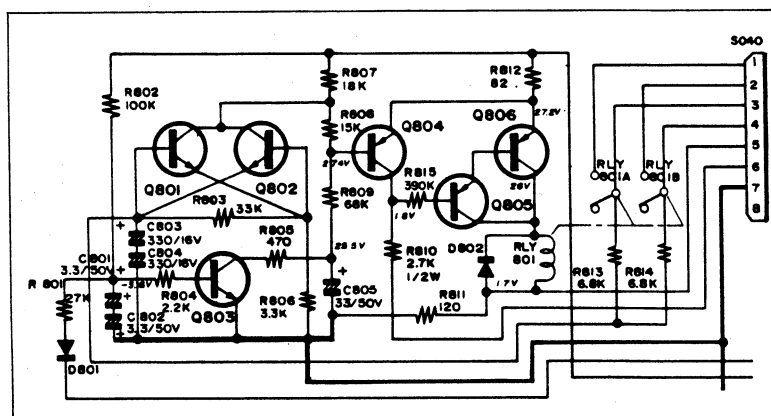


Figure 8

AF ALIGNMENT

PROCEDURE NUMBER	Alignment	Meter	Output Indicator	Setting	Adjustment	Remarks
1	Output DC Voltage (Offset Voltage)	100mV DC Voltmeter	Voltmeter is connected between speaker terminal and ground	Volume is minimum position. Other knobs are normal position	VR501A VR501B	0 V
2	Idle Current	100mV DC Voltmeter	Voltmeter is connected between Emitter of Q901 ~ Q904 and speaker terminal	Volume is minimum position. Other knobs are normal position	VR502A VR502B	33mV

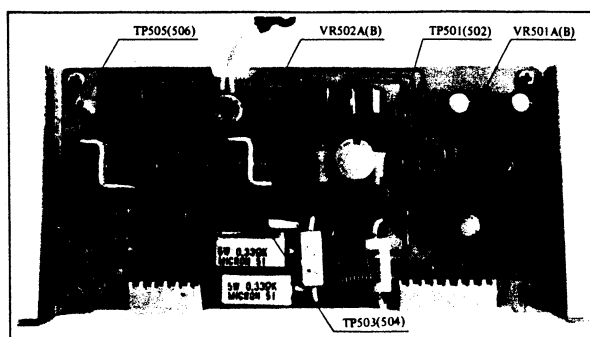


Figure 9 AF ALIGNMENT POINTS

POWER TRANSISTOR REPLACEMENT

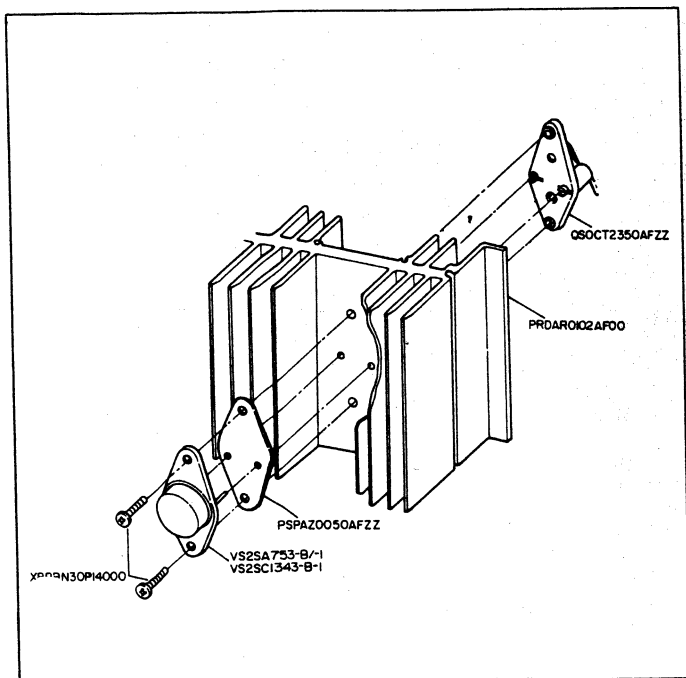


Figure 10

If it is necessary to replace audio output transistors, then follow these procedures to prevent reoccurrence of transistor failure.

1. Carefully remove transistor and mica isolator and clean all the silicone grease off the mica and the mounting area on the chassis. If the mica is damaged, then it must be replaced.
2. Remove the defective transistor and clean out the transistor mounting hole.
3. Put new silicone grease on the transistor mounting area of the chassis and on both side of the mica isolator. Mount the new transistor, being careful to tighten each transistor mounting screw evenly. Driving one screw tightly and then the other is likely to cause metal filings which may damage the mica or prevent necessary heat dissipation on chassis.
4. Before applying power to the new transistor, with an ohmmeter check to see that there is no short between the transistor case and chassis.
5. As transistor VS2SA753-B/-1 and VS2SC1343-B-1 are almost similar in the shape. So pay attention to the mark of transistor when replacing the power transistor.

RIPPLE FILTER TRANSISTOR REPLACEMENT

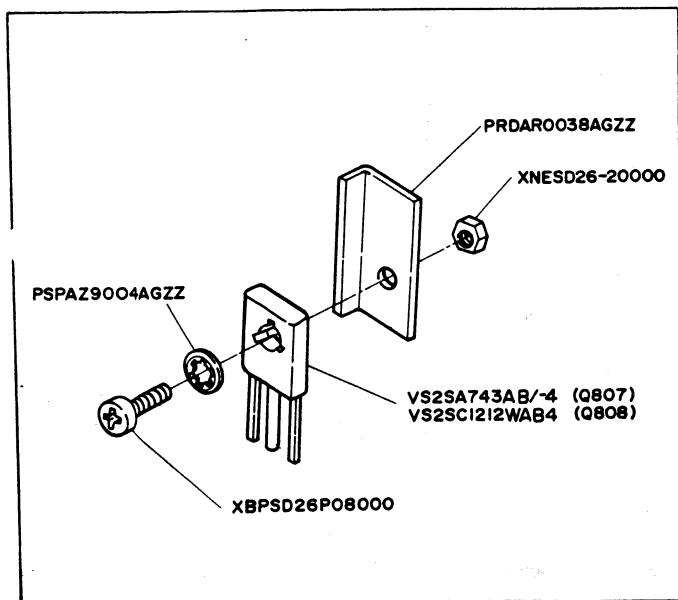


Figure 11

DRIVER TRANSISTOR REPLACEMENT

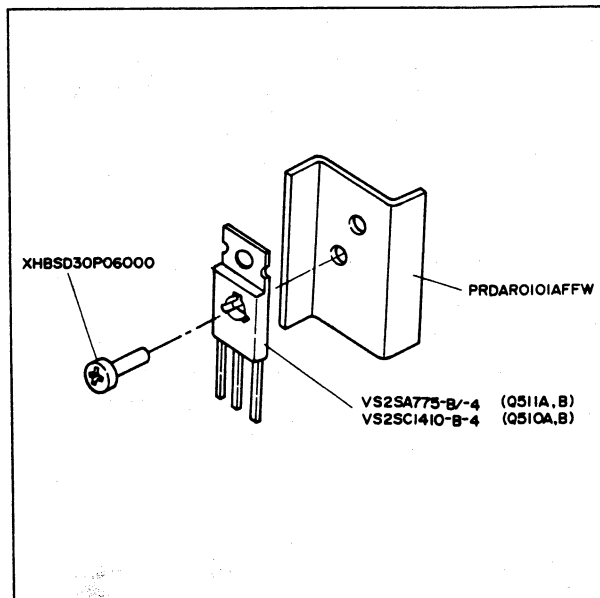
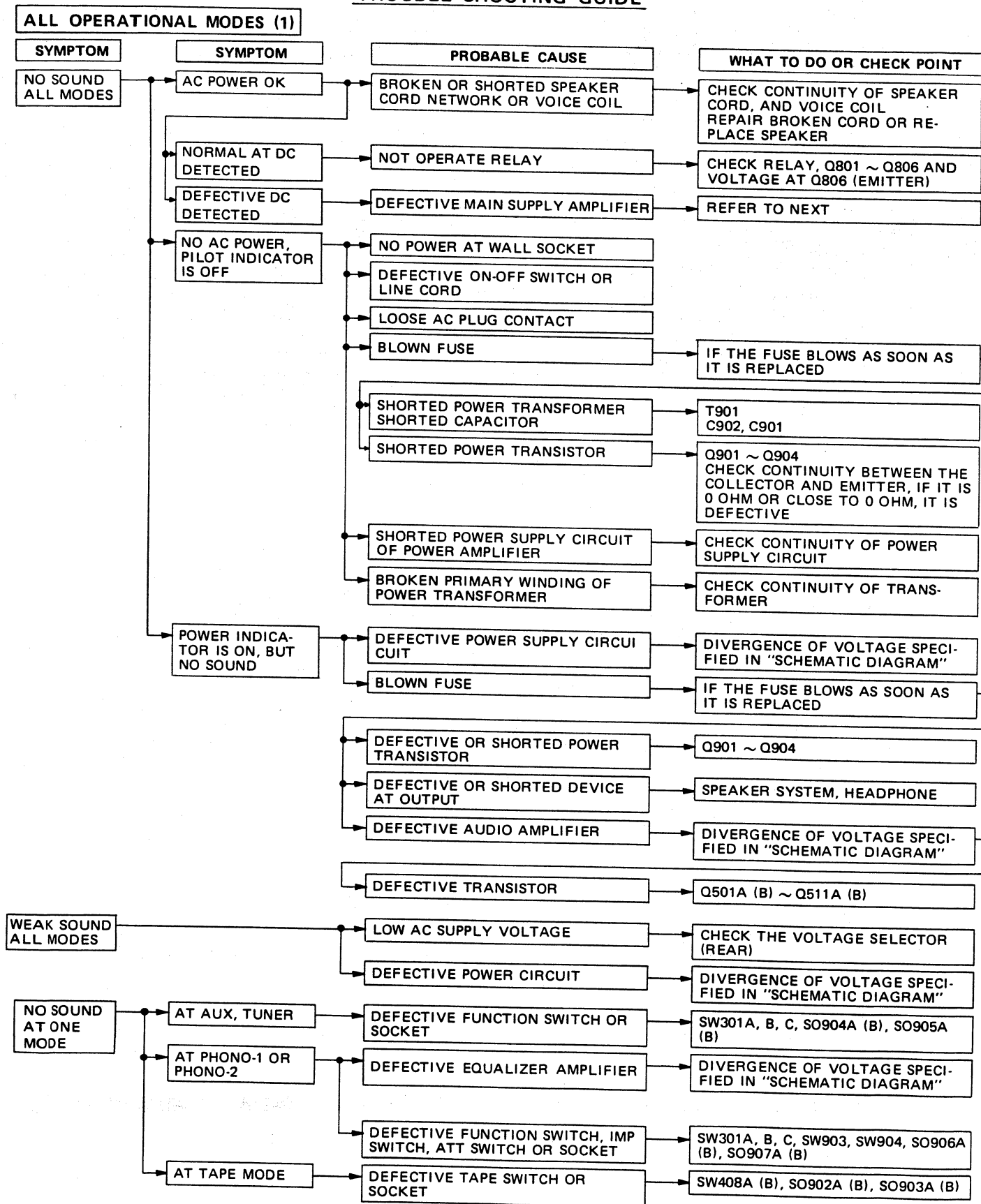
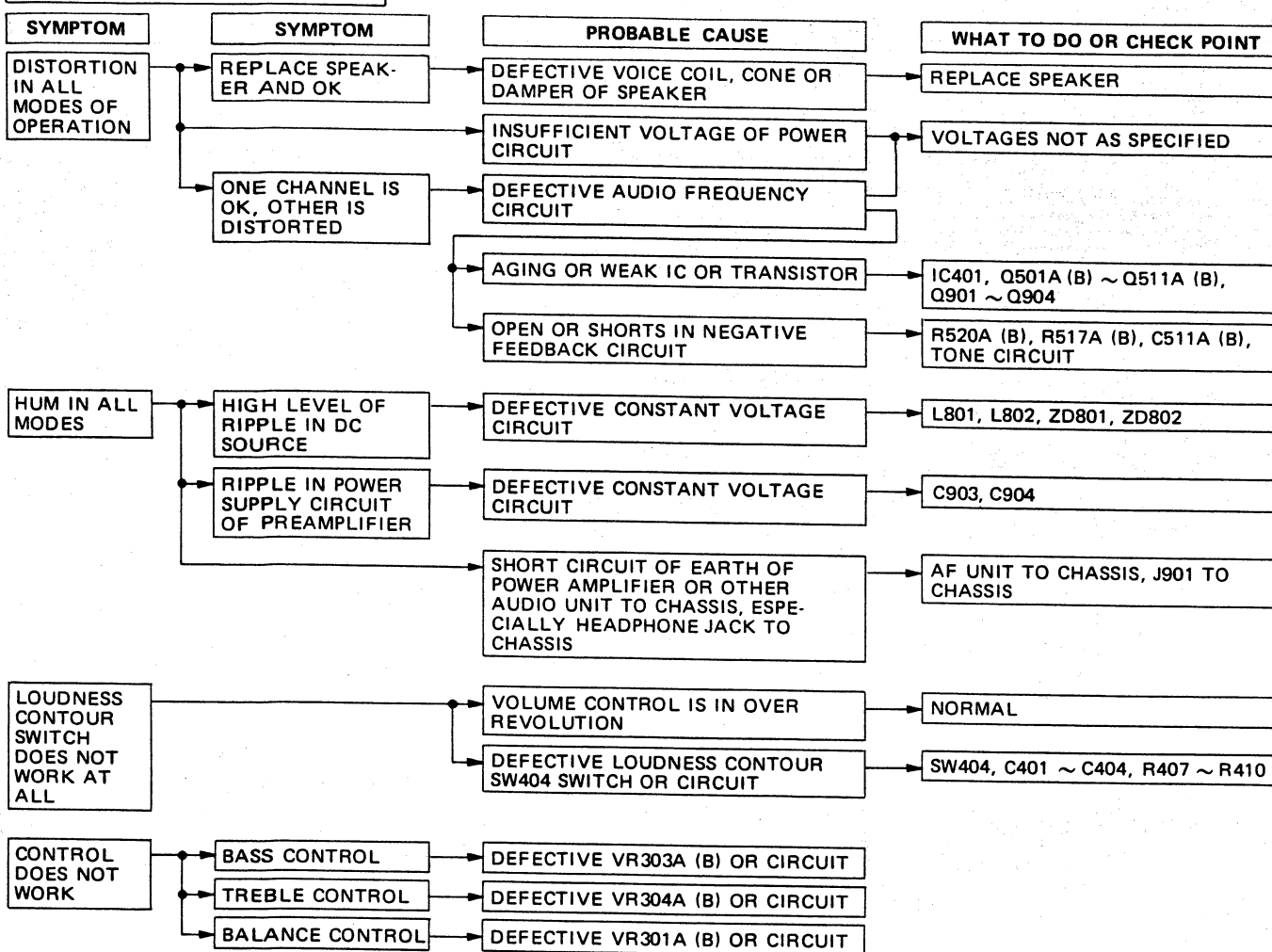


Figure 12

TROUBLE SHOOTING GUIDE



ALL OPERATIONAL MODES (2)



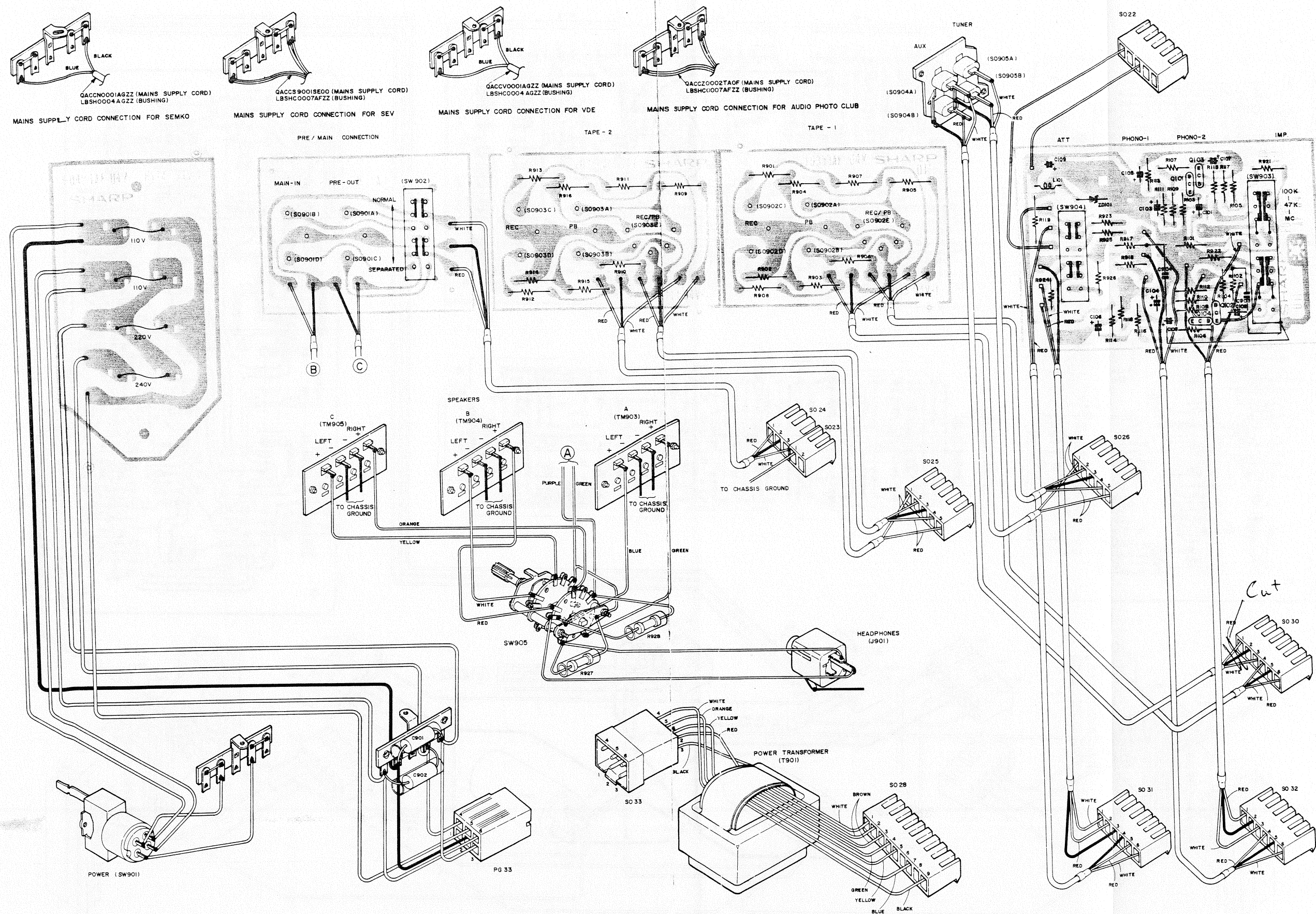


Figure 13 TAPE 1/TAPE 2/PRE MAIN/INPUTS CONNECTION BOARD WIRING SIDE

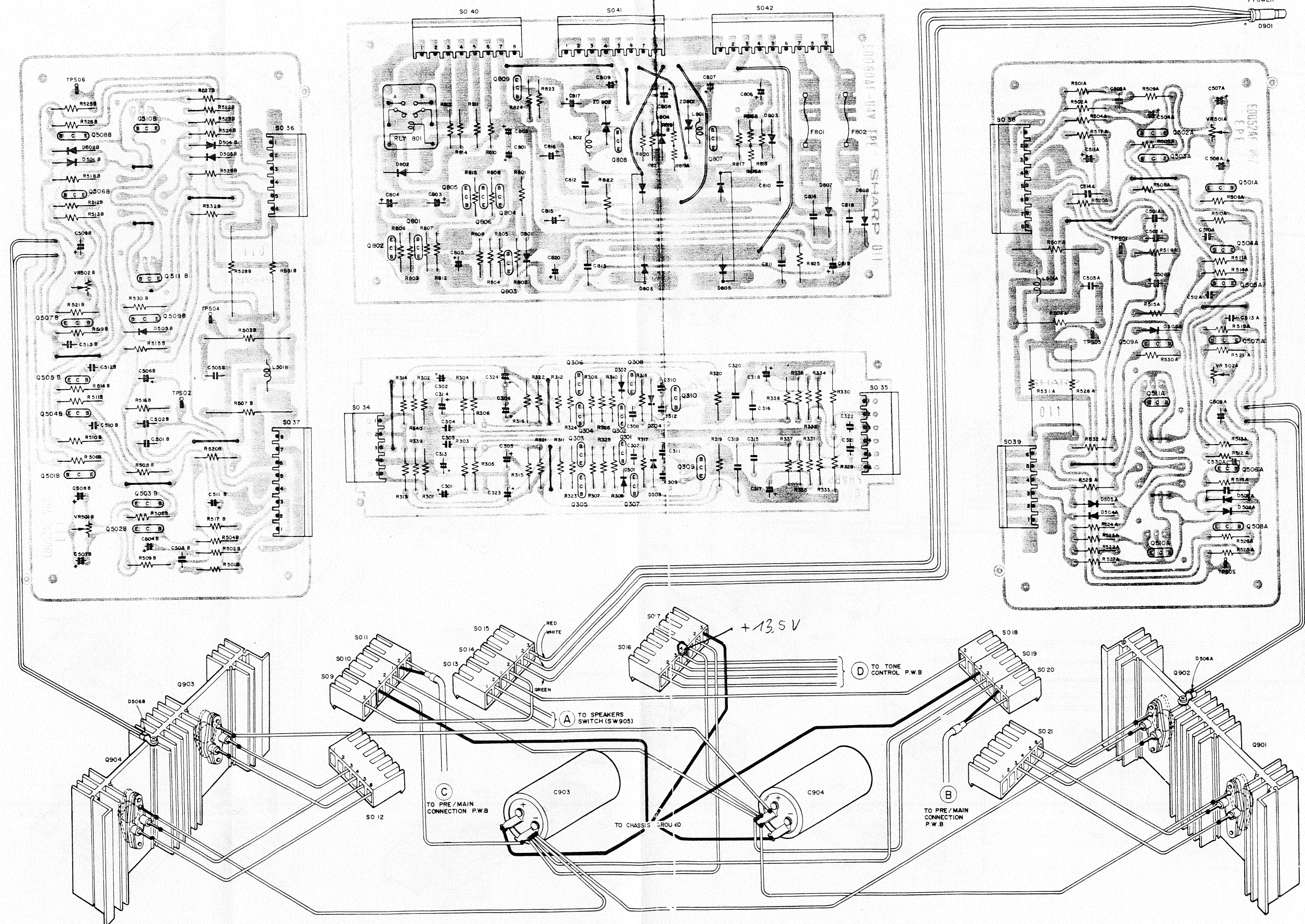


Figure 15 MAIN AMP./EQUALIZER AMP./AC & RLY UNIT BOARD WIRING SIDE

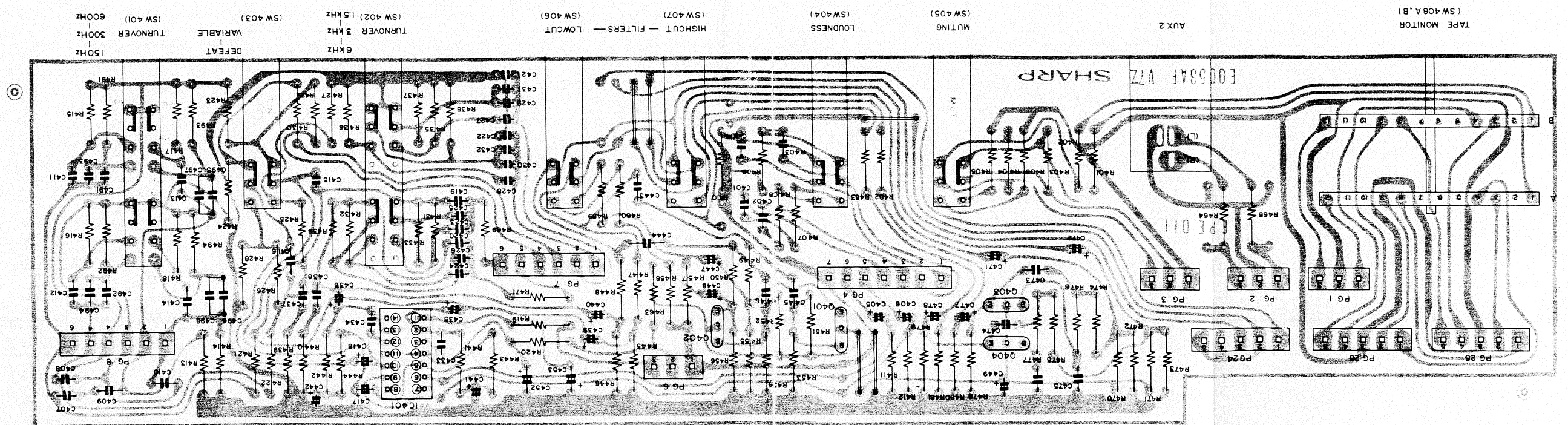
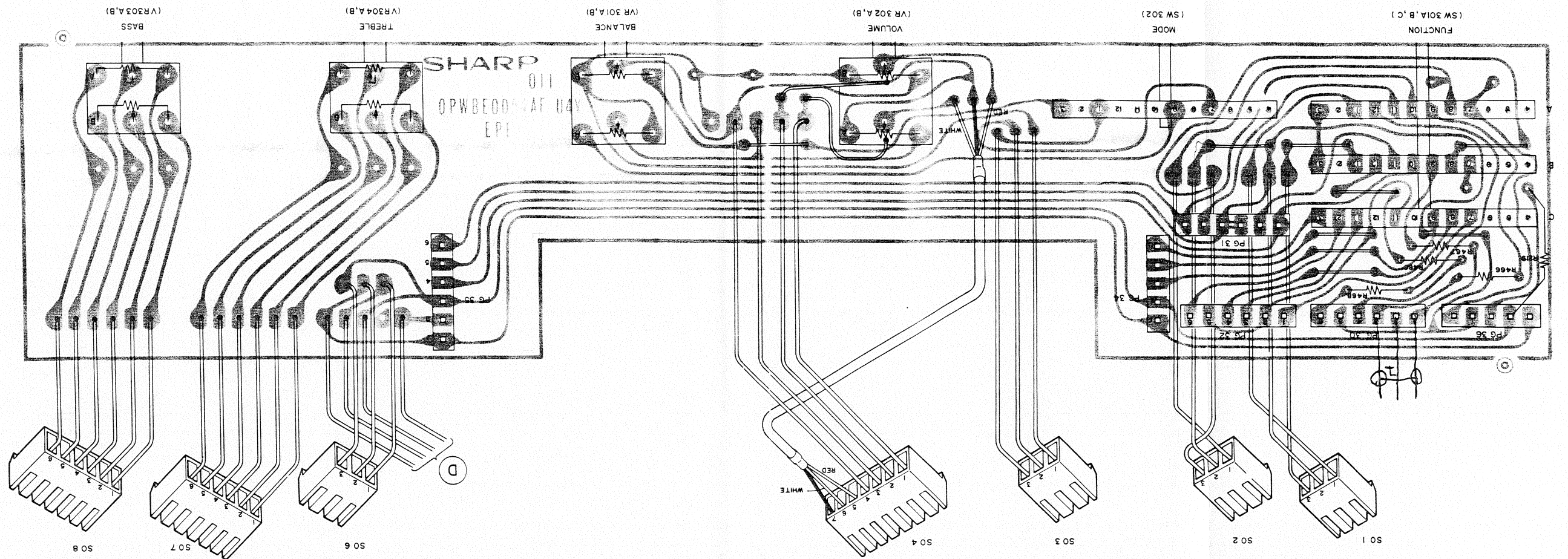
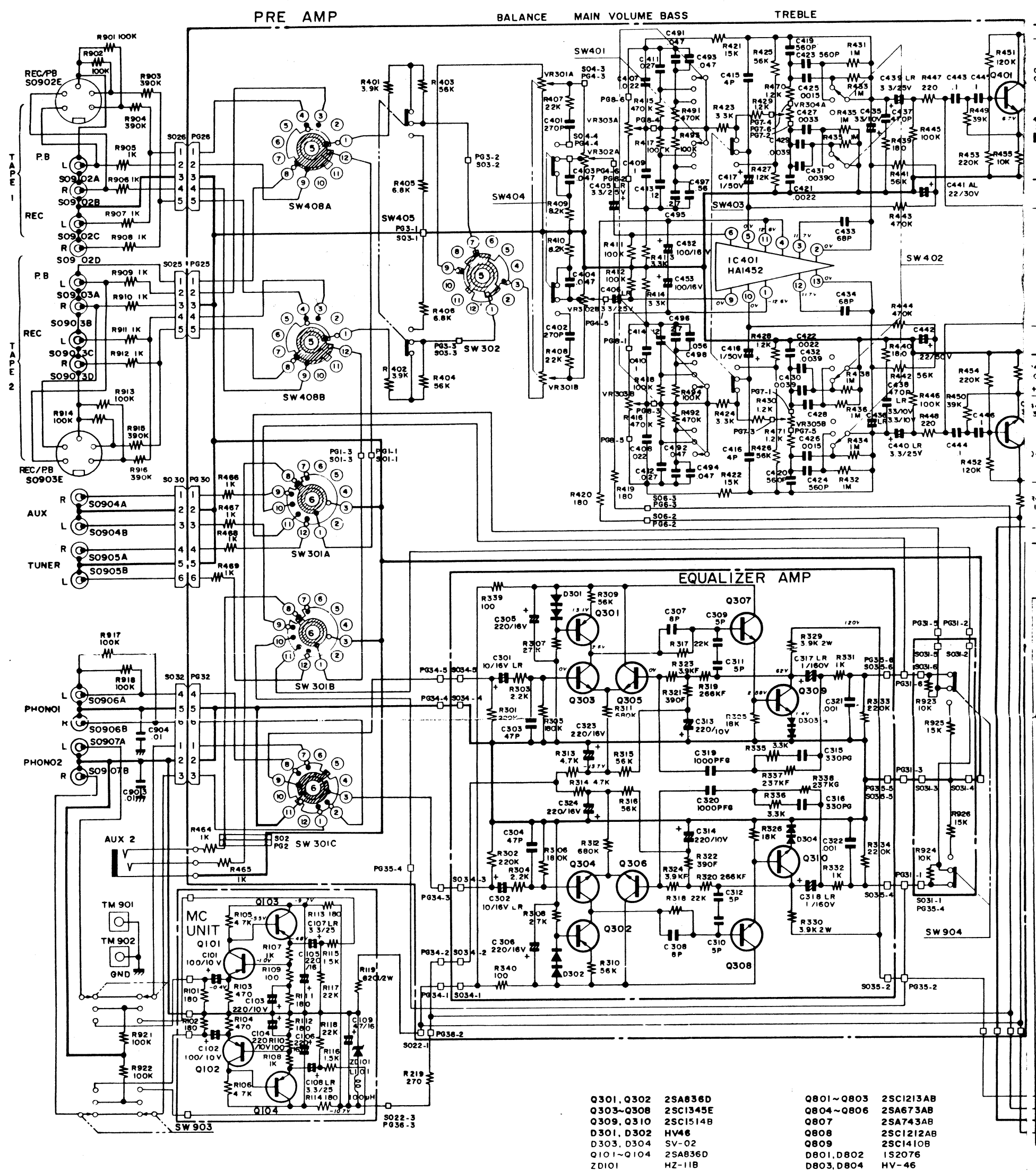
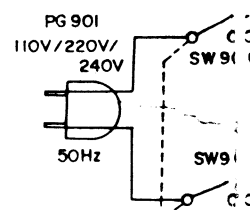


Figure 14 MAIN VOLUME BOARD WIRING SIDE



NOTES

1. ALL RESISTORS ARE SHOWN IN OHMS $\pm 5\%$.
K=1000, M=10⁶
2. ALL CAPACITORS ARE SHOWN IN MICROFARADS.
P=MMF
3. VOLTAGE READINGS ARE MEASURED WITH VTVM
UNDER NO SIGNAL.
4. SWITCHES ARE SHOWN UNDERLINED POSITION.



(Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.)

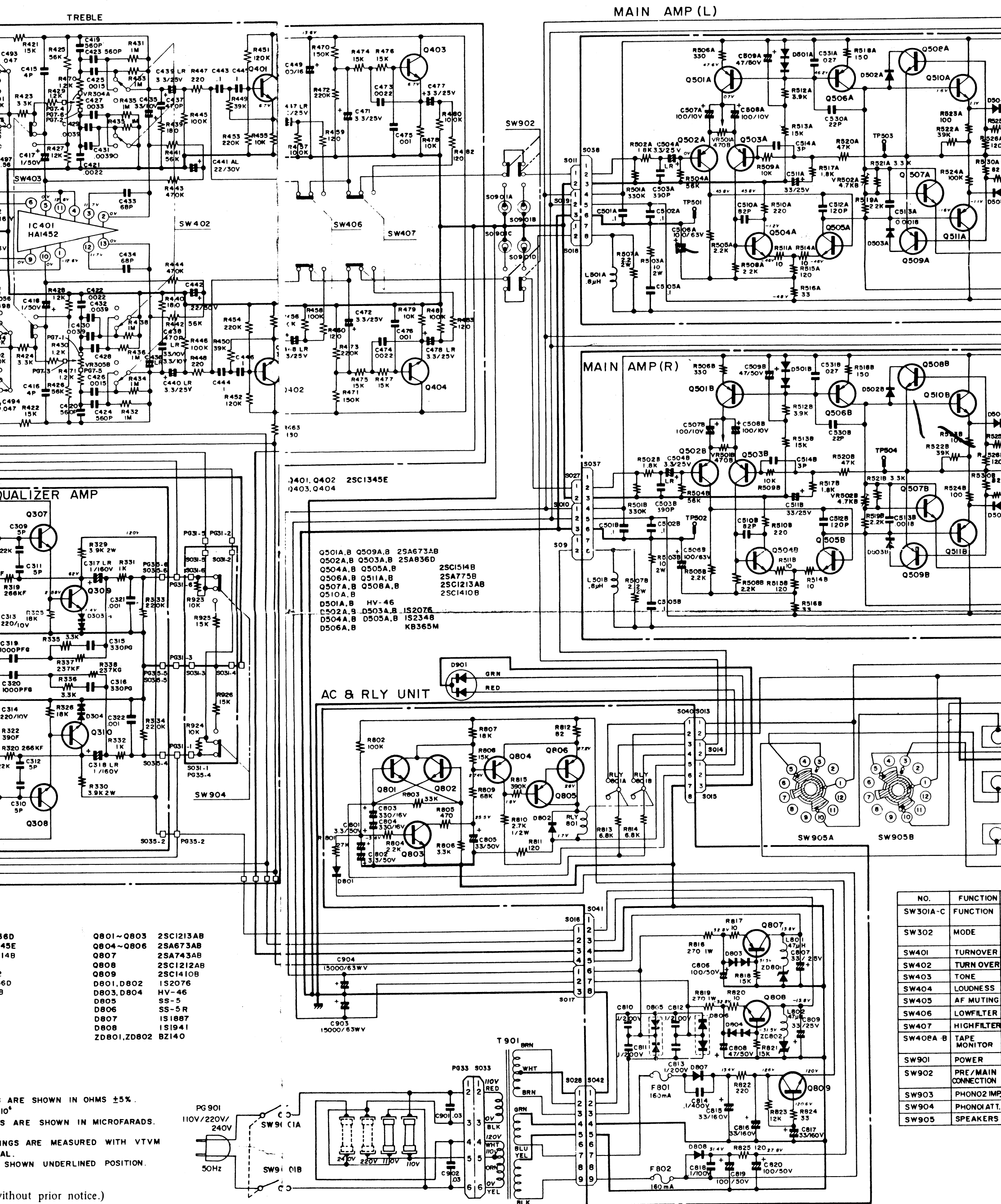
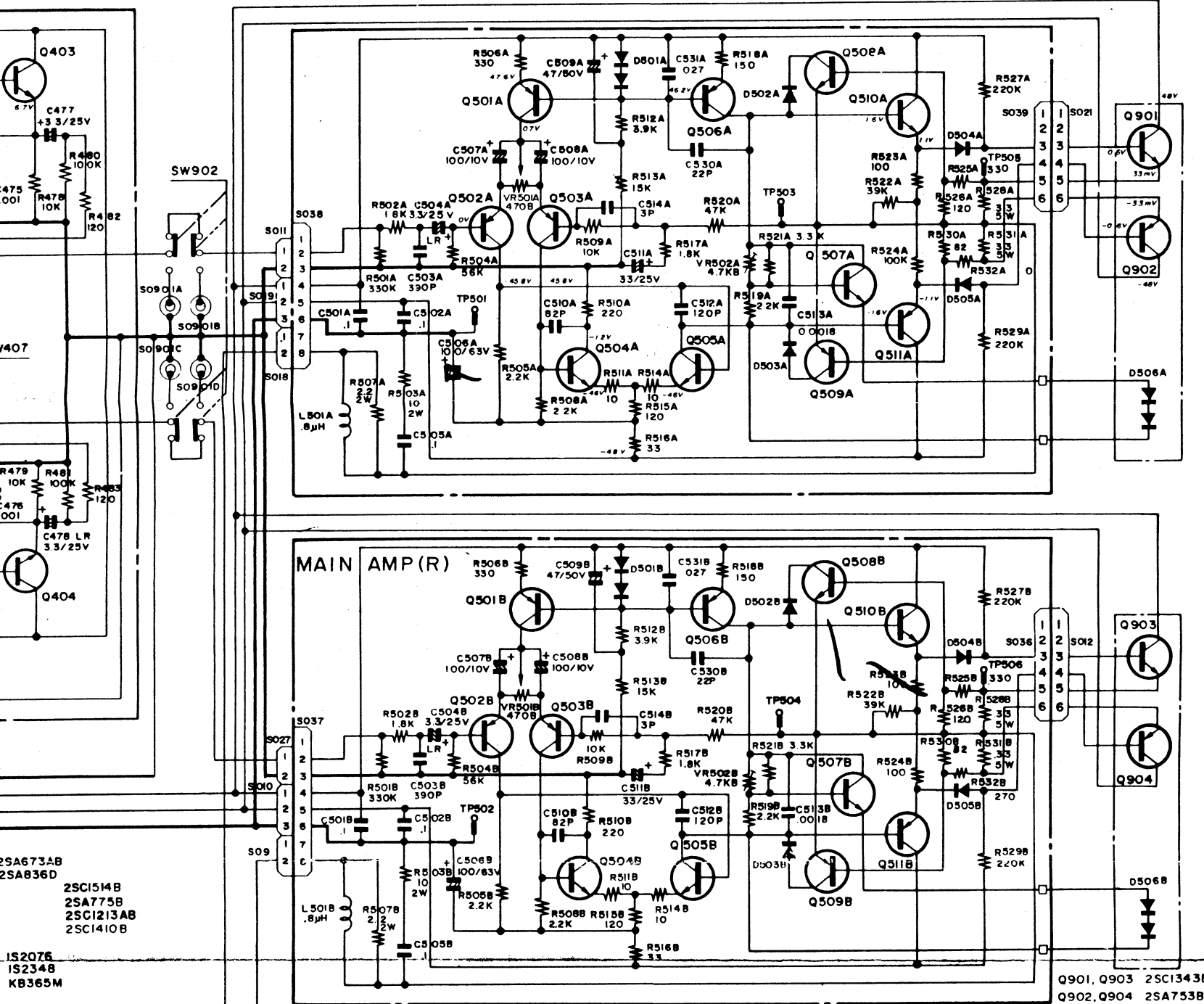


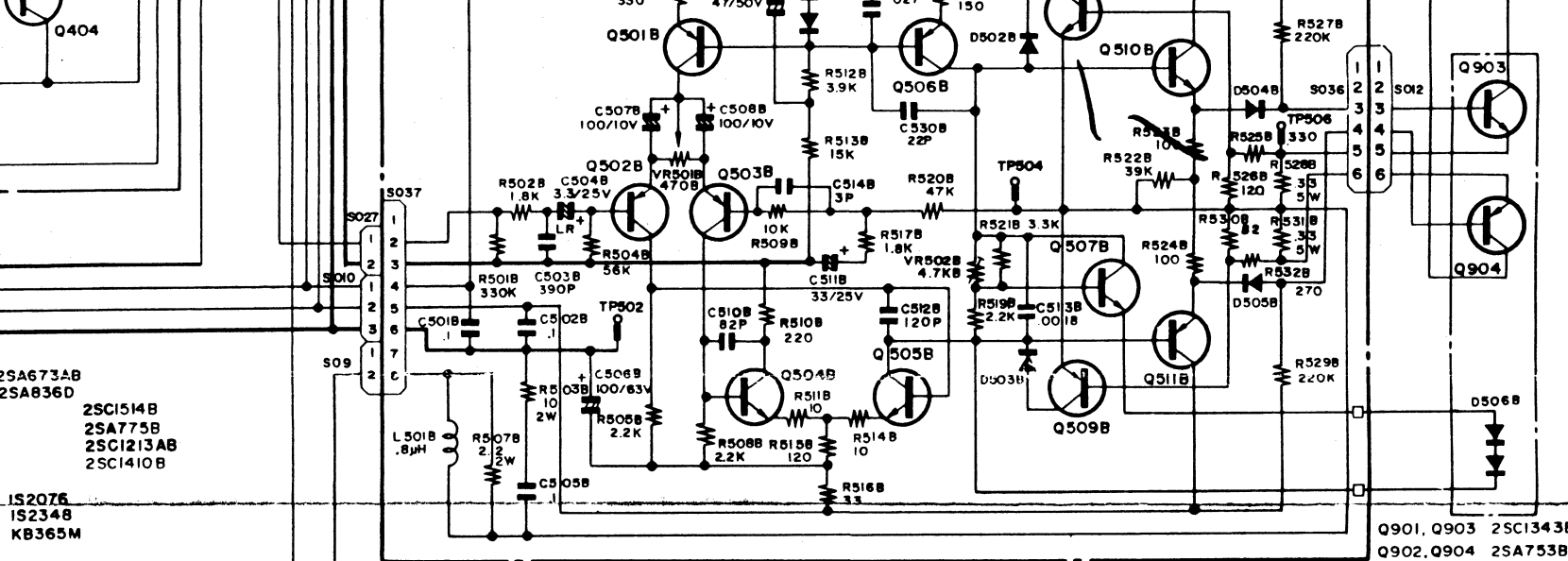
Figure 16 SCHEMATIC DIAGRAM

MAIN AMP (L)



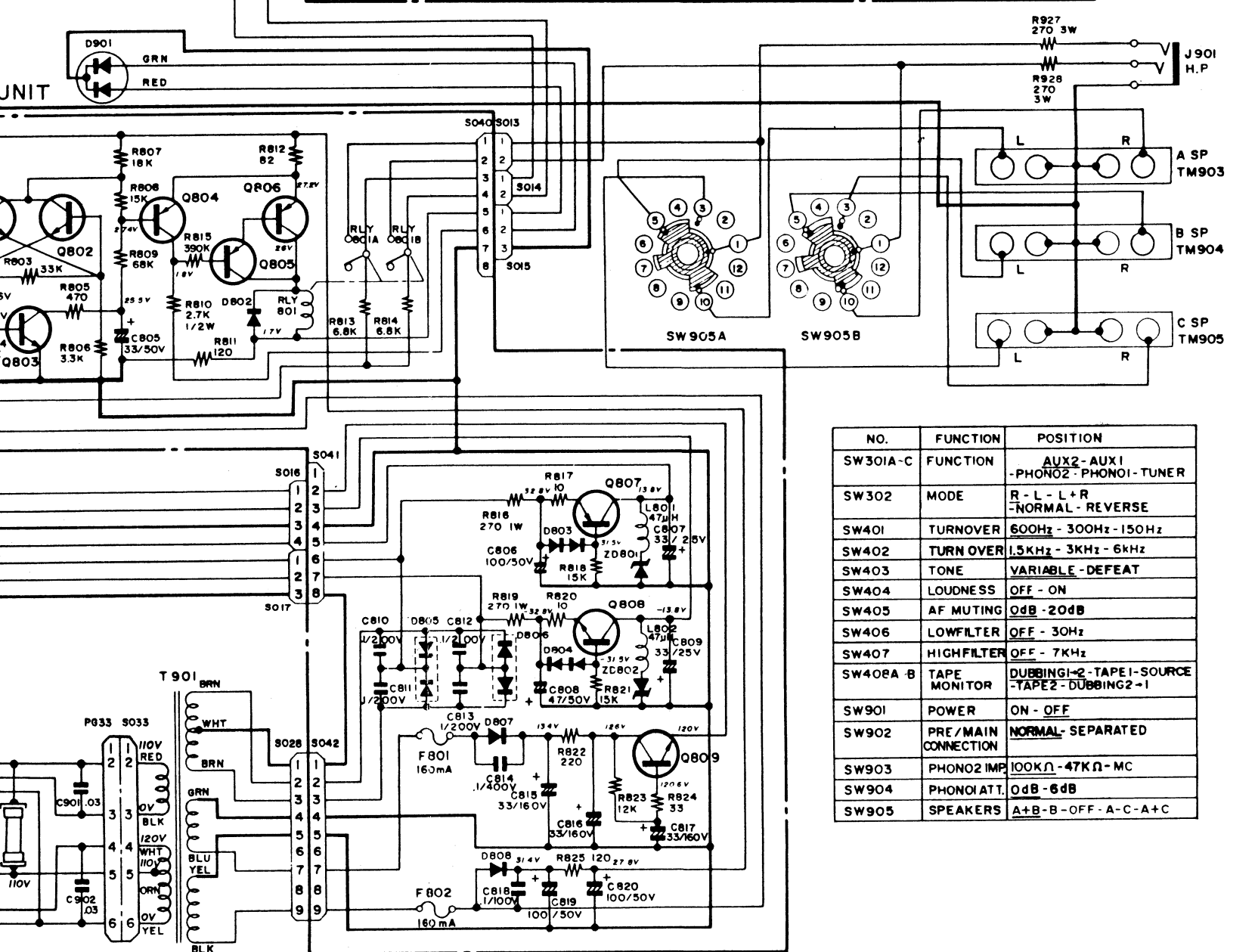
16

MAIN AMP (R)



Q901, Q903 2SC1343B
Q902, Q904 2SA753B

UNIT



NO.	FUNCTION	POSITION
SW301A-C	FUNCTION	AUX2-AUX1 -PHONO2-PHONO1-TUNER
SW302	MODE	R-L-L+R -NORMAL-REVERSE
SW401	TURN OVER	600Hz-300Hz-150Hz
SW402	TURN OVER	1.5kHz-3kHz-6kHz
SW403	TOPE	VARIABLE-DEFEAT
SW404	LOUDNESS	OFF-ON
SW405	AF MUTING	0dB-20dB
SW406	LOW FILTER	OFF-30Hz
SW407	HIGH FILTER	OFF-7kHz
SW408A-B	TAPE MONITOR	DUBBING1-2-TAPE1-SOURCE -TAPE2-DUBBING2-1
SW901	POWER	ON-OFF
SW902	PRE/MAIN CONNECTION	NORMAL-SEPARATED
SW903	PHONO2 IMP	100KΩ-47KΩ-MC
SW904	PHONO1 ATT	0dB-6dB
SW905	SPEAKERS	A+B-B-OFF-A-C-A+C

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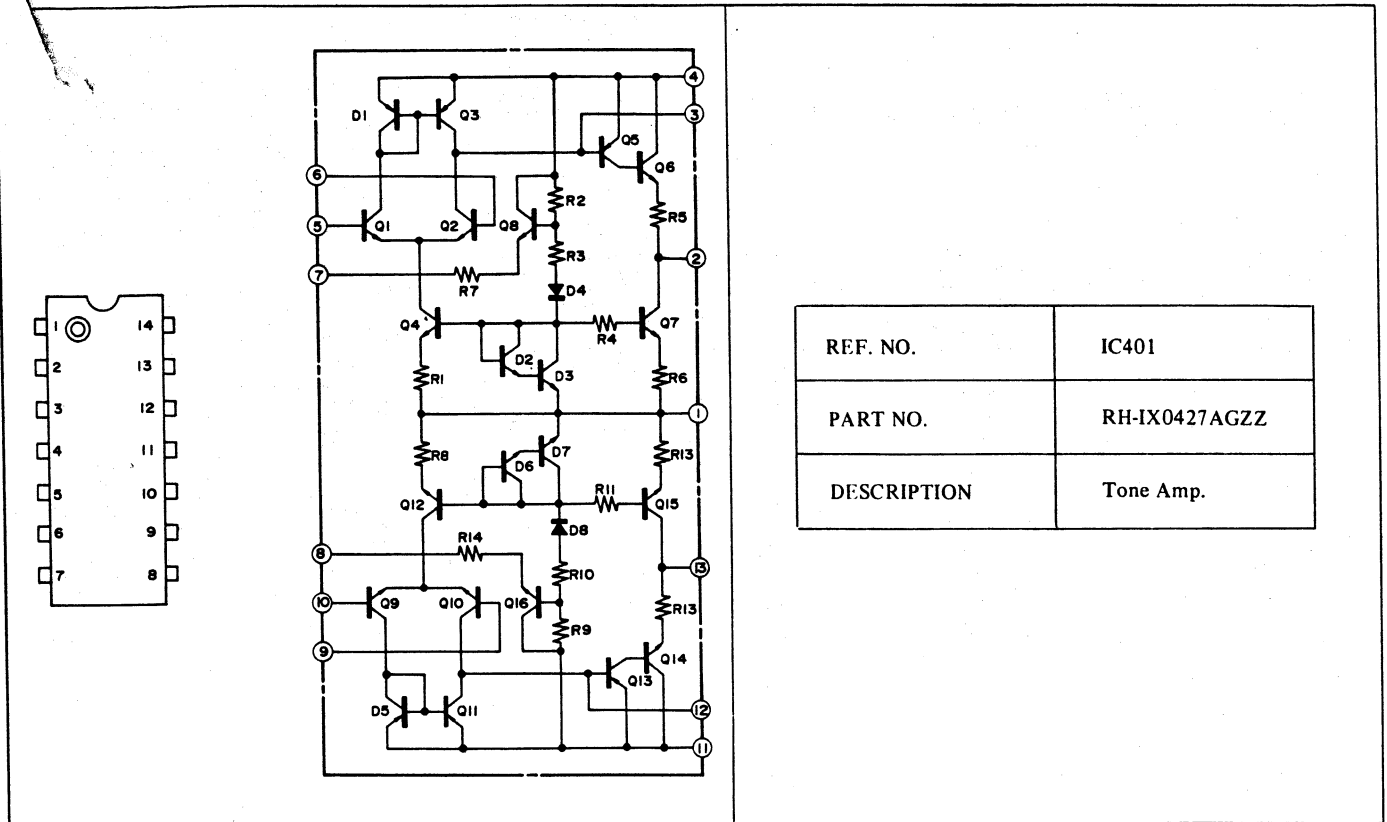


Figure 17 EQUIVALENT CIRCUIT

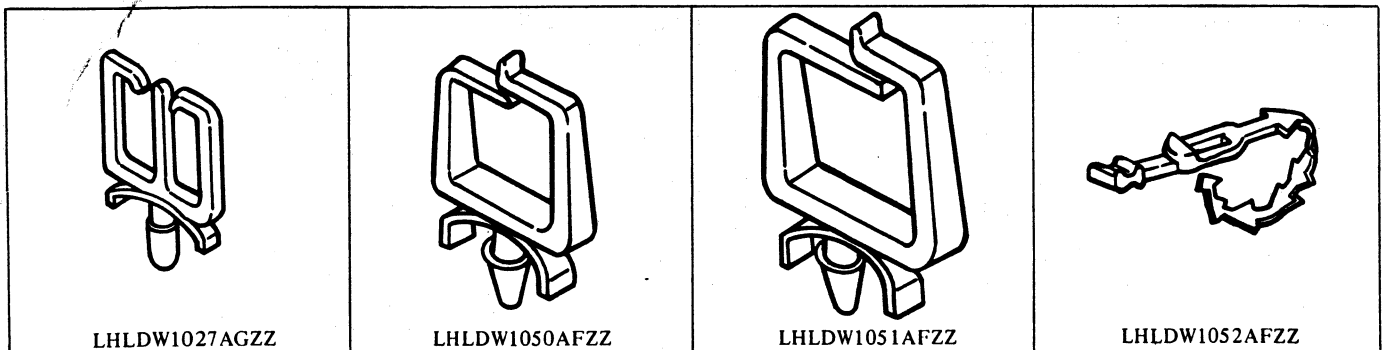


Figure 18 MISTAKABLE LEAD WIRE HOLDER

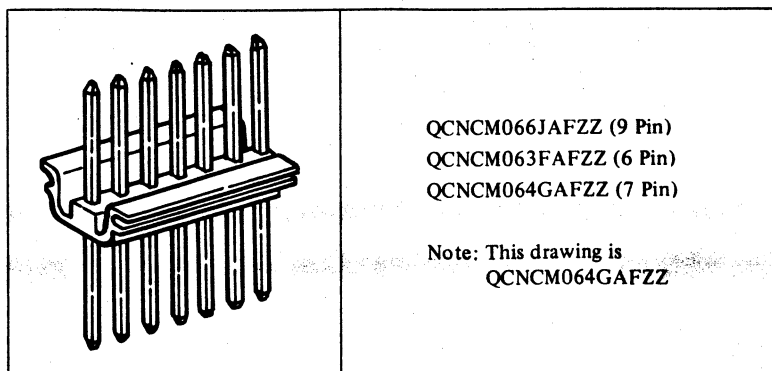


Figure 19 MISTAKABLE PLUG

REPLACEMENT PARTS LIST

“HOW TO ORDER REPLACEMENT PARTS”

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
TRANSISTORS							
Q101 ~ Q104	VS2SA836-D/-1	MC AMP.	AE	Q902, Q904	VS2SA753-B/-1	Power Amp.	AW
Q301, Q302	VS2SA836-D/-1	Equalizer, Constant Current Circuit	AE	ZD101	VHEHZ11B///-1	Zener	AD
Q303, Q304	VS2SC1345-E-1	Equalizer, Differential Amp.	AE	D301, D302	VHVHV46-G//1	Equalizer, Constant Current Circuit	AD
Q305, Q306	VS2SC1345-E-1	Equalizer, Differential Amp.	AE	D303, D304	RH-DX0010SEZZ	Equalizer, Constant Current	AG
Q307, Q308	VS2SC1345-E-1	Equalizer, Emitter Follower Circuit	AE	D501 (A, B)	VHVHV46-G//1	Constant Current Circuit	AD
Q309, Q310	VS2SC1514-B-1	Equalizer, Class "A" Amp.	AH	D502 (A, B)	VHD1S2076//1	Voltage Detector	AG
Q401, Q402, Q403, Q404	VS2SC1345-E-1	Lowcut Filter, Emitter Follower Circuit	AE	D503 (A, B)	VHD1S2076//1	Voltage Detector	AG
Q501 (A, B)	VS2SA673AB/-1	Power Amp, Constant Current Circuit	AG	D504 (A, B)	VHD1S2348-H-1	Spike-less Circuit.	AD
Q502 (A, B)	VS2SA836-D/-1	Power Amp, Differential Amp., 1st	AE	D505 (A, B)	VHD1S2348-H-1	Spike-less Circuit.	AD
Q503 (A, B)	VS2SA836-D/-1	Power Amp, Differential Amp., 1st	AE	D506 (A, B)	VHVMV203Y//1	Bias Circuit	AD
Q504 (A, B)	VS2SC1514-B-1	Power Amp., Differential Amp., 2nd	AH	D801	VHD1S2076//1	Detector	AG
Q505 (A, B)	VS2SC1514-B-1	Power Amp., Differential Amp., 2nd	AH	D802	VHD1S2076//1	Surge Current Provention	AG
Q506 (A, B)	VS2SA775-B/-4	Power Amp., Constant Current Circuit	AN	D803, D804	VHVHV46-G//1	Ripple Filter Circuit	AD
Q507 (A, B)	VS2SC1213AB-1	Power Amp., Bias Circuit	AF	D805	VHDSS-5////-F	Rectifier	AP
Q508 (A, B)	VS2SC1213AB-1	Power Amp., Voltage Detector	AF	D806	VHDSS-5R///-F	Rectifier	AP
Q509 (A, B)	VS2SA673AB/-1	Power Amp., Voltage Detector	AG	D807	VHD1S1887//1	Rectifier	AD
Q510 (A, B)	VS2SC1410-B-4	Power Amp., Driver Amp.	AL	D808	VHD1S1941//1	Rectifier	AD
Q511 (A, B)	VS2SA775-B/-4	Power Amp., Driver Amp.	AN	ZD801, ZD802	VHEBZ140///-1	Ripple Filter Circuit	AG
Q801, Q802	VS2SC1213AB-1	Protection Circuit, Speaker Output	AF	D901	VHPGL50RG//1	Indicator	AE
Q803	VS2SC1213AB-1	Protection Circuit, Power Off	AF	COILS			
Q804	VS2SA673AB/-1	Protection Circuit, Switching	AG	L101	VP-LH101K0000	100μH	AB
Q805	VS2SA673AB/-1	Protection Circuit, Switching	AG	L501 (A, B)	RCILZ0050AFZZ	.8μH	AD
Q806	VS2SA673AB/-1	Protection Circuit, Switching	AG	L801, L802	VP-LH470M0000	47μH	
Q807	VS2SA743AB/-4	Mains Supply Circuit, Ripple Filter	AL	TRANSFORMER			
Q808	VS2SC1212WAB4	Mains Supply Circuit, Ripple Filter	AH	T901	RTRNP0396AFZZ	Power	BQ
Q809	VS2SC1410-B-4	Mains Supply Circuit, Ripple Filter	AL	INTEGRATED CIRCUIT			
Q901, Q903	VS2SC1343-B-1	Power Amp.	AX	IC401	RH-IX0427AGZZ	Tone Amp.	AP

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
CONTROLS							
VR301 (A, B)	RVR-00004AGZZ	BALANCE	AL		PRDAR0038AGZZ	Heatsink, Small, Transistor (Q807, Q808)	AA
VR302 (A, B)	RVR-B0114AFZZ	VOLUME	AL		PRDAR0102AF00	Heatsink, Large, Power Transistor	AW
VR303 (A, B)	RVR-Z0050AFZZ	BASS	AL		PRDAR0101AFFW	Heatsink, Small, Transistor	AB
VR304 (A, B)	RVR-Z0050AFZZ	TREBLE	AL		PSHEF0048AG00	Felt, Cabinet	AA
VR502 (A, B)	RVR-M0065AGZZ	Idle Current Adjust	AF		PSHEF0110AFZZ	Felt, Masking, Lever Switch	AA
VR501 (A, B)	RVR-M0072AGZZ	Center Voltage Adjust	AG		PSPAN0004AF09	Spacer, Headphone Jack, AUX 2 Jack	AB
MISCELLANEOUS					PSPAP0012AGZZ	Washer, Headphone Jack, AUX 2 Jack	AA
	GCAB-3001AFSA	Cabinet	AZ		PSPAZ0050AFZZ	Insulator, Power Transistor	AB
	GCOVA1053AFSA	Guide, Lever Switch	AB		PSPA9004AGZZ	Washer, Retaining, Transistor	AA
	GFTAU3050AFZZ	Plate, Bottom	AN	PG1,	PZETF0101AFZZ	Insulator, Partition	AA
	GLEGP0002SG00	Leg, Cabinet Bottom	AD	PG2,	QACCN0001AGZZ	Cord, Mains Supply	AP
	HDECW0050AFSB	Board, Right & Left Hand Side	AR	PG3,	QACCZ0002AG08	Cord, Mains Supply	AF
	HPNLC3223AFSA	Plate, Operation 31504	BB	PG6	QACCS9001SE00	Cord, Mains Supply	AG
	JKNBN0272AFSA	Knob, VOLUME	AP	PG24,	QACCZ0002TA0F	Cord, Mains Supply	AF
	JKNBN0273AFSA	Knob, FUNCTION SELECTOR	AN	PG25,	QACCB0001AGZZ	Cord, Mains Supply	AN
	JKNBN0274AFSA	Knob, SPEAKERS/BASS/TREBLE/BALANCE/MODE/TAPE MONITOR	AL	PG26	QACCZ0002TA0F	Cord, Mains Supply	AG
	JKNBP0058AFSA	Knob, POWER/TURNOVER/LOWCUT/HIGHCUT/FILTERS/LOUDNESS/MUTING	AH	PG7,			
	LANGQ0447AFSA	Bracket, Terminal	AT	PG8,			
	LANGR0352AFZZ	Bracket, Operation Plate	AD	PG(30 ~ 32),	QCNCM051CAFZZ	Plug, 3 Pin	AC
	LANGR0357AFZZ	Bracket, Volume	AL	PG4			
	LANGT0451AFZZ	Bracket, Strengthen, Left & RIGHT Hand Side	AE		QCNCM053EAFZZ	Plug, 5 Pin	AD
	LANGT0452AFZZ	Bracket, Printed Wiring Board	AC		QCNCM054FAFZZ	Plug, 6 Pin	AD
	LANGT0453AFZZ	Bracket, Printed Wiring Board	AC		QCNCM055GAFZZ	Plug, 7 Pin	AE
	LANGT0456AFZZ	Bracket, PHONO Terminal P.W.B.	AB	PG34	QCNCM063FAFZZ	Plug, 6 Pin	AF
	LBSHC0004AFZZ	Bushing, Mains Supply Cord	AC	PG35	QCNCM064GAFZZ	Plug, 7 Pin	AG
	LBSHC0007AFZZ	Bushing, Mains Supply Cord	AB	SO9,	QCNCM066JAFZZ	Plug, 9 Pin	AH
	LCHSM0201AFZZ	Plate, Mounting	AR	SO11,	QCNCM073EAFZZ	Plug, 5 Pin	AC
	LHLDW1003SE02	Holder, Lead Wire	AA	SO13,	QCNCM074FAFZZ	Plug, 6 Pin	AC
	LHLDW1027AGZZ	Holder, Lead Wire	AA	SO14,			
	LHLDW1050AFZZ	Holder, Lead Wire	AB	SO18,	QCNCW050PAFZZ	Socket, 2 Pin	AC
	LHLDW1051AFZZ	Holder, Lead Wire	AB	SO20,			
	LHLDW1052AFZZ	Holder, Lead Wire	AA	SO23			
	LHLDW9003CEZZ	Holder, Lead Wire	AA	SO1,			
	LHLDZ9050AF00	Holder, LED	AV	SO2,	QCNCW051CAFZZ	Socket, 3 Pin	AC
	LX-NZ3030SEFN	Nut, Headphones/AUX 2 Jack	AA	SO3,			
	LX-WZ3017AEFN	Washer, GND Terminal	AA	SO6,			
	PCOVS3050AF00	Cover, Shield, Front	AP	SO10,			
	PCOVS3051AF00	Cover, Shield, Rear	AM	SO15,			
	PCOVS3052AFZZ	Bracket, Partition, Power Switch	AD	SO17,			
	PCOVW3101AFZZ	Cover, Fuse Holder, Acrylic	AF	SO19	QCNCW052DAFZZ	Socket, 4 Pin	AC
				SO16	QCNCW053EAFZZ	Socket, 5 Pin	AC
				SO25,			
				SO26			
				SO7,			
				SO8,	QCNCW054FAFZZ	Socket, 6 Pin	AC
				SO12,			
				SO21,			
				SO30,			
				SO31			

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